REMARKS

Favorable consideration and allowance are respectfully requested for claims 1-3 in view of the foregoing amendments and the following remarks.

The Examiner is thanked for the courtesies extended during the personal interview held March 30, 2005, the substance of which is reflected herein.

The rejection of claims 1-3 under 35 U.S.C. § 102 as anticipated by Harutyunyan et al. (U.S. 6,730,284), Uemura et al. (U.S. 6,552,055), Chen et al. (U.S. 6,495,258) or Yaniv et al. (U.S. 6,312,303) is respectfully traversed.

The claims have been amended to clarify the invention claimed therein. In particular, a number of words have been deleted and some of the phraseology is changed. None of these amendments introduces new elements to the claims and no new matter is presented by these amendments.

As amended, independent claims 1 and 2 each recites "carbonized fibrous bodies" and "graphite filaments". The distinctiveness of these two separate elements is shown, for instance, by figures 6, 7, and 8 of the present application which show graphite filaments (6) and fibrous bodies (8). These figures are supported in the specification on pages 12 and 13. Accordingly, it is clear that the claimed graphite filaments are different from the fibrous bodies.

The claims also require that the graphite filaments are provided in a particular spatial relationship with respect to the fibrous bodies. The graphite filaments are arranged: (i) on the surfaces of the fibrous body; (ii) in the inside of each fibrous body; and (iii) in between adjacent fibrous bodies. In this regard, please note that both claims 1 and 2 recite the conjunctive term "and" rather than the disjunctive "or" thereby clarifying that each of the listed places in which the graphite filaments appear is required in a single assembly in accordance

with the claims. Figures 6, 7 and 8 each shows one of these separate positions. Providing the graphite filaments in such an arrangement allows for a virtually limitless increase in the total number of graphite filaments. As the number of graphite filaments increases, the function of the fibrous carbon manifold assembly improves. In particular, a more uniform emission of field electrons causing an increase in the quantity of absorbed or occluded gas is achieved. Further, the electromagnetic absorbing (or shielding) properties are improved.

None of these references discloses an assembly where the graphite filaments are provided on all of (i) the surface of a carbonized fibrous body; (ii) the inside of a carbonized fibrous body and (iii) in between adjacent fibrous bodies, as is presently claimed.

Harutyaunyan et al. teaches filaments on the surface of a precursor, however it does not appear to show filaments inside a body or in between adjacent fibrous bodies. Further, while the reference teaches use of carbon-containing precursors, it does not appear to teach that the precursor is fibrous, as is required in the claims. See col. 6, lines 30-46 of Harutyaunyan et al., discussing the carbon-containing precursors.

Uemura et al. teaches a substrate which serves as a growth nucleus for nanotube fibers (see the abstract) however the reference does not appear to teach these nanotube fibers inside a fibrous substrate or in between adjacent substrates. Like Harutyaunyan et al., Uemura et al. does not appear to teach that the substrate is fibrous as is required in the present claims. Uemura does indicate that the substrate is grid-like and has through-holes, (see col. 2, lines 59-65, and figure 1). However, this is not the same as a fibrous substrate, as is presently claimed. Moreover, Uemura et al. does not teach fibers between adjacent fibrous bodies, as is claimed.

Chen et al. teaches nanotubes dispersed within a network of fibers. See the Summary of the Invention section of Chen, col. 4, lines 17-38. The reference does not teach that the nanotubes are provided on the surface of the network of fibers. Moreover, the reference does not teach that the nanotubes are provided in between adjacent fibrous bodies.

Finally, Yaniv et al. teaches aligning carbon nanotubes within a host material. See, e.g., the abstract. The host phase is described as liquid crystal, ordered metal fibers in a liquid, anizotropic particles or anizotropic crystals, elongated crystals in an isotropic liquid, or a long chain of polymer molecules. See col. 2, lines 17-50. At a minimum, the reference does not teach that the nanotubes are provided in between adjacent fibrous bodies.

Thus, the references fail to disclose or suggest the assembly of the claimed invention. Reconsideration and withdrawal of the rejections are respectfully requested.

CONCLUSION

In view of the foregoing, the application is respectfully submitted to be in condition for allowance, and prompt favorable action thereon is earnestly solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #100457.52481US).

Respectfully submitted,

April 4, 2005

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